

Conservation Strategy Options Evaluation Report Annotated Outline

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EXECUTIVE SUMMARY

The executive summary will briefly summarize the results of the Options Evaluation (2-3 pages of text). The summary will briefly describe the purpose for conducting the evaluation, the evaluation process, and compare the performance of each of the Options relative to each of the evaluation criteria categories. The performance of each of the Options will also be displayed graphically. Comparison graphics are anticipated to include:

- Overall performance of the Options for each of the covered fish species based on biological criteria
- Overall performance of the Options for meeting water supply objectives (Criterion #8)
- Overall performance of the Options based on the overall results of the evaluation for each of the criteria categories

The executive summary will be formatted to allow it to be presented as a separate document for informational purposes.

1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

This section will describe the purpose for conducting the Options evaluation.

1.2 CONSERVATION STRATEGY OPTIONS

This section describes the physical features of the CS Options, the range of habitat restoration opportunities, modeling parameters, and key assumptions used to assess the performance of each Option.

- 1.2.1 Conservation Strategy Option 1**
- 1.2.2 Conservation Strategy Option 2**
- 1.2.3 Conservation Strategy Option 3**
- 1.2.4 Conservation Strategy Option 4**

1.3 CURRENT CONDITIONS

Current conditions will provide a common basis of comparison from which to evaluate the performance of each Option to each relevant criterion. This section will define current conditions as used in the evaluation.

1.4 EVALUATION CRITERIA

This section will describe the Options evaluation criteria selected by the Steering Committee.

1.5 EVALUATION PROCESS

This section will provide an overview of the evaluation process and presentational content of the evaluation.

2.0 EVALUATION METHODS

This section will describe the methods used to conduct the Options evaluation.

2.1 COVERED FISH SPECIES STRESSORS

This section will summarize important stressors for each of the covered fish species and describe how the stressors were identified. Detailed back up for the stressors will be provided in Appendix A.

2.1.1 White Sturgeon

This section will describe the important stressors for white sturgeon and this header will be repeated for each species. Stressors and associated impact mechanisms will be displayed graphically or in table form as appropriate.

2.12 Green Sturgeon

2.13 Central Valley Chinook Salmon

2.14 Central Valley Steelhead

2.15 Delta Smelt

2.16 Longfin Smelt

2.17 Sacramento Splittail

2.2 HYDROLOGIC/HYDRODYNAMIC MODELING

This section will describe the models used to conduct the analysis, overall approach to modeling, modeling parameters and rationale for their selection, and key assumptions.

Specific parameter values (i.e., tables of model inputs and outputs) will be referenced to:
Appendix B: Conservation Strategy Option Operations Parameter Values

2.3 BIOLOGICAL CRITERIA

This section will describe the general approach/tools used to conduct the evaluation of the criteria, including descriptions of metrics and scales used to conduct the evaluation, and will describe key assumptions used to evaluate each criterion. This information will be repeated for each of the other criteria categories.

2.4 PLANNING CRITERIA

2.5 FLEXIBILITY/SUSTAINABILITY/DURABILITY CRITERIA

2.6 OTHER RESOURCE IMPACTS CRITERIA

3.0 CONSERVATION STRATEGY OPTION 1 EVALUATION

The evaluation of each criteria will include the assessment of the range of outcomes based on modeling outputs of Option A and B. Reference to:

Appendix C: Option 1 Hydrologic/Hydrodynamic Model Results

Appendix D: Option 2 Hydrologic/Hydrodynamic Model Results

Appendix E: Option 3 Hydrologic/Hydrodynamic Model Results

Appendix F: Option 4 Hydrologic/Hydrodynamic Model Results

3.1 BIOLOGICAL CRITERIA

Evaluation of biological criteria will be organized by species with an assessment of each applicable biological criteria presented in the text.

The general content for the evaluation of each species is expected to include:

- The stressors relevant to each criterion that would measurably be affected by the Option with reference back to the stressor tables.
- The stressor impact mechanisms that are affected by the Option.
- Description of how the impact mechanisms are affected by the option (cause and effect relationship).
- Metrics used to measure the effect on each stressor.
- The net population effect
- Make assessment of relative performance of Options to other Options
- Make comparison of Option performance relative to current conditions.

3.1.1 White Sturgeon

This section will present the evaluation of all the biological criteria by species.

3.1.2 Green Sturgeon

3.1.3 Central Valley Chinook Salmon

3.1.4 Central Valley Steelhead

3.1.5 Delta Smelt

3.1.6 Longfin Smelt

3.1.7 Sacramento Splittail

3.2 PLANNING CRITERIA

3.2.1 Planning Criterion #8

3.2.2 Planning Criterion #9

3.2.3 Planning Criterion #10

3.3 FLEXIBILITY/DURABILITY/SUSTAINABILITY CRITERIA

3.3.1 Flexibility/Durability/Sustainability Criterion #11

3.3.2 Flexibility/Durability/Sustainability Criterion #12

3.3.3 Flexibility/Durability/Sustainability Criterion #13

3.3.4 Flexibility/Durability/Sustainability Criterion #14

3.4 OTHER RESOURCE IMPACTS CRITERIA

3.4.1 Other Resource Impacts Criterion #15

3.4.2 Other Resource Impacts Criterion #16

3.4.3 Other Resource Impacts Criterion #17

4.0 CONSERVATION STRATEGY OPTION 2 EVALUATION

Headers under this section will repeat as shown above for *3.0 Conservation Strategy Option 1 Evaluation*.

5.0 CONSERVATION STRATEGY OPTION 3 EVALUATION

Headers under this section will repeat as shown above for *3.0 Conservation Strategy Option 1 Evaluation*.

6.0 CONSERVATION STRATEGY OPTION 4 EVALUATION

Headers under this section will repeat as shown above for *3.0 Conservation Strategy Option 1 Evaluation*.

7.0 COMPARISON OF THE OPTIONS

This section will compare the relative performance of each of the Options to each other and to current conditions for each of the criteria. This comparison will include graphic displays of the evaluation results for each Option by criteria.

8.0 OPPORTUNITIES FOR CONSERVATION ELEMENTS AVAILABLE UNDER ALL OPTIONS

This section will identify the relative opportunity for implementing conservation elements that address non-flow and non-habitat related stressors (e.g., toxics, harvest, etc.) under each of the Options.

APPENDIX A: COVERED FISH SPECIES STRESSORS

APPENDIX B: CONSERVATION STRATEGY OPTION OPERATIONS PARAMETER VALUES

APPENDIX C: OPTION 1 HYDROLOGIC/HYDRODYNAMIC MODEL RESULTS

Appendices C-F will primarily consist of graphic displays of model outputs.

APPENDIX D: OPTION 2 HYDROLOGIC/HYDRODYNAMIC MODEL RESULTS

APPENDIX E: OPTION 3 HYDROLOGIC/HYDRODYNAMIC MODEL RESULTS

APPENDIX F: OPTION 4 HYDROLOGIC/HYDRODYNAMIC MODEL RESULTS